INTISARI

Dalam kegiatan eksplorasi minyak, hampir setiap pemboran yang dilakukan melalui formasi bertekanan tinggi menyebabkan kerugian biaya, polusi lingkungan alam, hilangnya cadangan minyak, dan terancamnya kehidupan manusia. Untuk alasan ini pengertian tentang asal mula tekanan abnormal, cara mendeteksi, dan evaluasi tekanan abnormal sangat penting untuk masa depan industri.

Keberadaan formasi bertekanan abnormal dapat diperkirakan dari data kecepatan interval yang diperoleh dari data seismik dan profil kecepatan interval dan selanjutnya dikorelasikan dengan data sumur.

Analisa data kecepatan interval daerah penelitian menunjukkan bahwa formasi bertekanan abnormal sebagian besar ditemukan pada kedalaman ± 1000 meter pada formasi Tawun. Diperkirakan formasi bertekanan abnormal di daerah penelitian disebabkan oleh adanya proses sedimentasi yang cepat dan proses terjadinya struktur patahan.

ABSTRACT

In the oil exploration, nearly all of wells drilled through abnormally pressured formations experience trouble leading to great expense, pollution of natural environment, loss of petroleum reserves, and loss of human life. For this reason, an understanding of the origin, detection, and evaluation of abnormal pressures is important to the future of the industry.

The presence of abnormally pressured formations can be estimated from interval velocity of seismic data and a profile of interval velocity and then correlated with nearest of wells data.

Interval velocity data analysis of a studied area has been shown that abnormally pressured formations were found mostly in ± 1000 metres depth in Tawun formation. It's estimated that abnormally pressured formations in a studied area of interest were caused by rapidly sedimentation and faulting.